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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,603	11/03/2004	Gerhard Nestler	260740US0PCT	5700
22850 7590 01/26/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER CHOI, LING SIU	
			ART UNIT	PAPER NUMBER
			1713	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/511,603

Applicant(s)

NESTLER ET AL.

Examiner

Ling-Siu Choi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                       |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/20/06, 7/14/0</u> . | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. The request filed on 11/20/2006 for a Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/511,603 is acceptable and a RCE has been established. An action on the RCE follows.

2. This Office Action is in response to the Amendment filed November 20, 2006. Claim 7 was canceled and claims 1-6 and 8-12 are now pending, wherein claims 1-6 and 11-12 are drawn to a process to prepare a low-odor hydrogel-forming acrylic acid polymer; claim 8 is drawn to a hydrogel-forming addition polymer; claim 9 is drawn to a method to prepare a hygiene article; and claim 10 is drawn to a hygiene article.

### ***Claim Analysis***

3. Summary of claim 1:

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A process to prepare a low-odor hydrogel-forming acrylic acid polymer, comprising the steps of	
A	(i) preparing a polymeric hydrogel by free-radically polymerizing a monomer composition comprising at least 50 wt% of acrylic acid containing volatile saturated carboxylic acids selected from the group consisting of <b>acetic acid, propionic acid</b> and combinations thereof as impurities in a total amount of <u>less than 400 ppm</u> by weight, based on the amount of acrylic acid in an aqueous polymerization medium and (ii) converting the hydrogel into a particulate hydrogel or into hydrogel-forming powder; and optionally
B	treating the particulate hydrogel or the hydrogel-forming powder with a <b>crosslinking substance</b> which, actually or latently, contains at least two functional groups capable of reacting with the carboxyl groups on the addition polymer

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office

action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1, 4-6, and 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Irie et al. (US 6,388,000 B1).

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Irie et al. are silent on acetic acid, propionic acid, or combinations thereof as impurities, which implies that the amount of acetic acid, propionic acid, or combinations thereof as impurities is 0 ppm which reads on the total amount of less than 400 ppm

Irie et al. disclose a method to prepare an absorbent resin, comprising the steps of preparing a water-soluble unsaturated monomer having a ratio of neutralization in the range of 30-100 mol % and containing 50-100 mol % of an acrylate; then polymerizing the monomer in the presence of a first cross-linking agent in an amount of 0.005-5 mol%, based on the amount of monomer; and pulverizing and/or granulating to obtain powdered absorbent resin, wherein the cross-linking agent contains at least two functional groups (abstract; cross-linking agent: col. 10, lines 51-67 and col. 11, lines 1-23; claims 1 and 3). Irie et al. further disclose that the absorbent resin is used in the fields of hygienic materials (col. 1, lines 63-64). Thus, the present claims are anticipated by the disclosure of Irie et al.

6. Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to the Applicants' Arguments***

7. Applicants' arguments filed November 20, 2006 have been fully considered but they are not deemed to be persuasive.

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"Irie discloses a method for the production of a hydrophilic resin which comprises using a water-soluble unsaturated monomer having a  $\beta$ -hydroxy propionic acid(salt) content of not more than 1,000 ppm.....  $\beta$ -hydroxy propionic acid can be easily removed from acrylic acid by distillation...on the other hand, it is not possible to reduce the concentration of propionic acid...and acetic acid...by simple distillation..."

It is noted that Irie et al. are silent on the acetic acid, propionic acid, or combinations thereof as impurities. Thus, amount of these impurities would be 0 ppm which reads on "less than 400 ppm". Thus, the rejection of claims 1, 4-6, and 8-12 are maintained.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.

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*L. S. Choi*

LING-SUI CHOI  
PRIMARY EXAMINER

January 15, 2007